

group, 39 in the long term group. No cases reported any visible clinical deformity. There were no significant differences between the grip strengths or range of movements of the short-term and long-term groups. Although complications may justify delayed imaging, results suggest 'late' radiographs have no impact on our outcome measures. We recognised the potential benefits of removing any unnecessary radiographs, and also the need to formulate an established radiological follow up regime.

0030: ENHANCING THE MECHANICAL PROPERTIES OF COLLAGEN BY PHOTO-CHEMICAL CROSS-LINKING

Shafiq Shahban, Robert Brown, Umber Cheema, Laurent Bozec. *Tissue Repair and Engineering Centre, Royal National Orthopaedic Hospital (RNOH), Stanmore, London, UK*

Background: Tissue Engineering proposes a mechanism through which tendon injuries can be treated by means of inserting cell-seeded scaffolds. To enhance the mechanical properties of collagen type I scaffolds we used: a) plastic compression and b) photochemical crosslinking. The scaffolds were subjected to blue light through to induce crosslinking and provoke anisotropy. This study aims to assess the mechanical properties and degree of cell viability in such a scaffold.

Materials & Methods: Collagen scaffolds contained 4ml of type I collagen, 0.5ml riboflavin, 0.5ml 10x MEM and 0.5ml of cells. Each scaffold was plastically compressed and high intensity blue light was used to encourage crosslinking. Mechanical properties were assessed through tensile testing, and cell viability through using a live/dead stain.

Results: The scaffolds which had photochemical-crosslinks running horizontally had a higher Force at Failure over the controls ($p < 0.05$). A scaffold containing 2×10^6 HDFs, was subjected to blue light through a horizontal mask and incubated at 37°C for 3 days, after which, a border of live and dead cells could be seen, signifying the non-crosslinked and crosslinked regions.

Conclusion: The ability to induce anisotropy into native collagen scaffolds whilst maintaining cell viability shows immense potential for designing biomimetic structures for muscle-tendon interface.

0048: A PROSPECTIVE RANDOMISED CONTROL TRIAL ON PATIENT RECALL AFTER INFORMED CONSENTING IN DAY CASE SURGERY. WHAT AND HOW MUCH, DO PATIENTS WANT TO KNOW?

Z. Khan, A.E. Sayers, N. Eastley, M.U. Khattak, S.O. Shafqat, S.J. Naima. *Scunthorpe General Hospital, Northern Lincolnshire, UK*

Introduction: Informed consent implies that the person undergoing an intervention thoroughly understands its pros and cons. We conducted a randomised control trial to evaluate patients recall of complications associated with hand surgery and the effects of age and socioeconomic factors. Patients' wishes on the extent and type of information were also evaluated.

Methodology: Patients undergoing elective daycase hand surgery were recruited over 6 months. Patients were randomised into 2 groups, one receiving verbal information and the second group both verbal and written information. On their first post op visit, a test of recall of complications was conducted.

Results: 48 patients were included in group 1 (verbal only) and 66 in group 2 (Verbal & written information). No statistically significant ($P=0.1$) difference was noted in the recall between the two groups. No effect of gender, age or socioeconomic status was noted. More patients preferred both written and verbal information. Preference for knowledge of rates of complications was higher if risk was 1 in 100 or more.

Conclusion: Informed consenting is a contentious issue. Our results don't show any significant difference in patient recall depending on the type of consenting method. Nevertheless, we still propose that patients should receive as much information as possible before undergoing any intervention.

0050: OUTCOME OF SECONDARY PATELLAR RESURFACING

Mouhamed El Sayad, Gaffar Dudhniwala, Andrew Davies. *Morrison Hospital, Swansea, UK*

Introduction: Resurfacing the patella at the time of primary arthroplasty remains controversial. Patients presenting with anterior knee pain following a total knee replacement are not uncommon. There is scarce literature regarding the benefits of secondary resurfacing of the patella in these patients.

Objectives: Our aim was to evaluate the outcome of a cohort of secondary patellar resurfacing in patients that had received a primary knee replacement and presented later with patellofemoral symptoms.

Methods: Data were collected prospectively on 16 patients that had Secondary patellar resurfacing. These patients were assessed through two different scoring systems the Oxford knee score and the American knee society score preoperatively and in the post operative period between 6 weeks to 3 years of follow up.

Results: Of the 16 knee prostheses included in the study, 7 were Sigma PFC fixed bearing designs, 3 Nexgen Cruciate Retaining, 4 LCS porocoat and 2 Scorpio Cruciate retaining designs. Mean pre-op AKSS Knee and function scores were 41.25 and 38. Mean Pre-op Oxford knee score was 33.68 (29.83%). These improved to 74.57, 63.31 and 22.12 (53.91%) respectively in the post-operative period.

Conclusion: Of the 16 patients operated, 12 reported significant improvement, whilst 4 felt that they had not experienced an improvement in their symptoms. On this basis we continue to offer secondary patellar resurfacing.

0060: RECONSTRUCTION OF NEGLECTED TENDO-ACHILLES RUPTURE USING FLEXOR HALLUCIS LONGUS. A PROSPECTIVE REVIEW

Thomas Yeoman, Michael Brown, Anand Pillai. *NHS Tayside, Dundee, UK*

Background: Various repair techniques have been reported for neglected tendo-Achilles rupture. We aimed to prospectively investigate the impact of short flexor hallucis longus (FHL) transfer to the calcaneus for patients with this injury.

Methods: A consecutive series of patients undergoing FHL transfer for neglected tendo-Achilles rupture were reviewed. Ankle function and patient health were assessed pre and post-operatively using the American Foot and Ankle Society outcome score (AOFAS) and the SF-36 score.

Results: 10 patients (6 male, mean age 50 years) with ruptures secondary to trauma were included. Mean time to surgery was 20.5 weeks. The average AOFAS increased from 61.4 preoperatively to 80.6 at 3 month postoperatively. The average physical component score of SF-36 improved from 41.84 to 48.14. The average mental component score improved from 46.38 to 53.8 at 3 month postoperatively. Pain scores improved from mild to moderate preoperatively to very mild postoperatively.

Conclusion: Our results demonstrate the benefit of FHL tendon transfer for neglected tendo-Achilles rupture. Direct transfer to the calcaneum with an interference screw allows correct tensioning and secure fixation. The procedure is reliable and has a low morbidity. This in-phase transfer restores normal ankle dynamics and power.

0076: OUTCOME MEASURES IN FLAT FOOT: ANALYSIS OF PAEDOBAROGRAPHY AND RADIOGRAPHIC TECHNIQUES

Lambros Athanatos, Mathew Nixon, Gill Holmes, Leroy James, Alf Bass. *Alder Hey Children's NHS Foundation Trust, Liverpool, UK*

Aim: To compare the paedobarographic findings of normal feet to flat feet and investigate if there are sensitive paedobarographic markers that can be used in diagnosing flat feet.

Methods: We retrospectively collected data from eighteen patients (thirty-five feet) between 10-16 years of age. Our control group consisted of patients with normal arched feet and the study group of patients with symptomatic flat feet awaiting surgical correction. The mean and standard deviations of foot pressures measured at the hindfoot, medial/lateral/total midfoot (MMF,LMF,TMF),forefoot and the percentage of weight going through the MMF over the TMF [medial midfoot ratio (MMFR)] during the mid-stance gait phase are reported. In addition the sensitivity, specificity, positive predictive value (PPV) and negative predictive value (NPV) were estimated.

Results: The flat feet group had significantly higher MMF, LMF,TMF and MMFR ($P < 0.001$ Mann-Whitney). LMF had the highest sensitivity and NPV (94%) whereas MMF, TMF and MMFR had the highest specificity and PPV (100%).

Conclusions: Compared to our control group, patients with symptomatic flexible flat feet had significantly higher pressures in the midfoot, in particular in the medial midfoot. Paedobarography appears to be a sensitive and specific tool in diagnosing flat feet and has the potential to make radiological examination unnecessary.